

Unit 2 Plan

Designed by: J. Moor, R. Rawhowser, A. Sanchez, M. Saucedo
Grade: 9
Subject: Algebra 1

Designed in School Year: 2010-2011
Unit: Solving Linear Equations
Estimated Timeframe: 4 weeks

Unit topic and subtopics	Essential Learning	Standards	Assessments	Strategies
Solving Linear Equations	<p>Understandings (Students will understand that):</p> <ul style="list-style-type: none"> • An equation represents the balance between two equal quantities. • Equations can be used to solve real-life situations. 	<p>Illinois State Standards:</p> <p>6.B.4 6.C.4 6.D.4 7.A.4a 7.A.4b 7.C.4c 8.B.4a 8.D.4</p>	<p>Anchor Performance Assessment:</p> <p>Task Overview: Exhibit mastery of skills presented in this unit by providing written solutions to a variety of algebraic problems.</p>	<p>Homework assignments, class discussion, small group activities</p>
Solving a Variety of Linear Equations using a Variety of Methods	<p>Skills (Students will be able to):</p> <ul style="list-style-type: none"> • solve a one-step linear equation (using addition/subtraction and multiplication/division) • solve a two-step linear equation • solve a multi-step linear equation (combine like terms, use distributive property) • solve equations with variables on both sides • rewrite an equation (ex: solve for y: $3x + 4y = 8$) and formulas • solve a word problems using ratios and percents • solve a proportion (using cross-multiplication) • solve a percentage problem 	<p>College Readiness Standards: Expressions, Equations, & Inequalities (13-23)</p> <p>Basic Operations & Applications (20-23)</p> <p>Common Core Standards: A-CED.1 A-CED.2 A-CED.4 A-REI.3</p>	<p>Products: Comprehensive written exam assessing the skills practiced in this unit.</p> <p>Criteria: An exam score below 69.5% is failing. An exam score of 69.6%–76.4% is below average, 76.5%–84.4% is average, 84.5%–92.4% is above average, and 92.5% or above is excellent.</p> <p>Other Key Assessments/Evidence: Frequent quizzes assessing the skills practiced in this unit.</p>	<p>Tests and quizzes</p> <p>Oral participation: Students both ask and answer questions posed by the teacher and other students</p> <p>Notebook entries which include the results of:</p> <ul style="list-style-type: none"> • demonstrations: students working individually, in pairs, or in groups demonstrate ideas using manipulatives, graph paper, calculators, or whiteboard • non-routine problems: the student restates the problem in his own words, explores the problem by drawing a picture or a chart, chooses a strategy such as guess and test, looks for a pattern, logical deduction, working backward, or exhaustive listing, and carries out the chosen strategy to solve the problem • error analysis and commentary, in which students keep a list of specific homework, tests, and quiz problems that resulted in errors; the format includes a statement of the problem as posed, a statement of the exact error made, and a correction and comment